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SHARP-CUTOFF PENTODE

7-PIN MINIATURE TYPE

With heater having controlled warm-up time

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage	6.3	ac or dc volts
Current	0.3 ± 6%	amp
Warm-up time (Average)	11	sec

For definition of heater warm-up time and method of determining it, see sheet HEATER WARM-UP TIME MEASUREMENT at front of this Section.

Direct Interelectrode Capacitances:

	Without External Shield	With External Shield°	
Grid No.1 to plate	0.025 max.	0.015 max.	μμf
Grid No.1 to cathode & internal shield & grid No.3, grid No.2, and heater	6.5	6.5	μμf
Plate to cathode & internal shield & grid No.3, grid No.2, and heater	2	3	μμf

Characteristics, Class A_1 Amplifier:

Plate-Supply Voltage	125	125	volts
Grid No.3	♦	♦	
Grid-No.2 Supply Voltage	125	125	volts
Grid-No.1 Voltage	-3	-	volts
Cathode Resistor	-	56	ohms
Plate Resistance (Approx.)	-	0.28	megohm
Transconductance	-	8000	μmhos
Plate Current	2.8	13	ma
Grid-No.2 Current	-	3.7	ma
Grid-No.1 Voltage (Approx.) for plate μa = 20	-	-6.5	volts

Mechanical:

Operating Position	Any
Maximum Overall Length	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/2" ± 3/32"
Diameter	0.650" to 0.750"
Dimensional Outline	*See General Section*
Bulb	T5-1/2
Base	Small-Button Miniature 7-Pin (JEDEC No.E7-1)

°,♦: See next page.

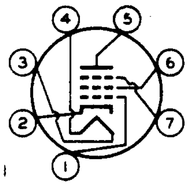
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SHARP-CUTOFF PENTODE

Basing Designation for Bottom View. 7CM

Pin 1 - Grid No.1
Pin 2 - Cathode
Pin 3 - Heater
Pin 4 - Heater
Pin 5 - Plate



Pin 6 - Grid No.2
Pin 7 - Grid No.3, Internal Shield

AMPLIFIER — Class A_1

Maximum Ratings, ***Design-Maximum Values:***

PLATE VOLTAGE	330	max.	volts
GRID-No.3 (SUPPRESSOR-GRID) VOLTAGE . .	0	max.	volts
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	330	max.	volts
GRID-No.2 VOLTAGE	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*		
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Positive-bias value	0	max.	volts
GRID-No.2 INPUT:			
For grid-No.2 voltages up to 165 volts.	0.55	max.	watt
For grid-No.2 voltages between 165 and 330 volts	*See Grid-No.2 Input Rating Chart at front of Receiving Tube Section*		
PLATE DISSIPATION	2.3	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode.	200	max.	volts
Heater positive with respect to cathode.	200▲	max.	volts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:			
For fixed-bias operation.	0.25	max.	megohm
For cathode-bias operation.	1	max.	megohm

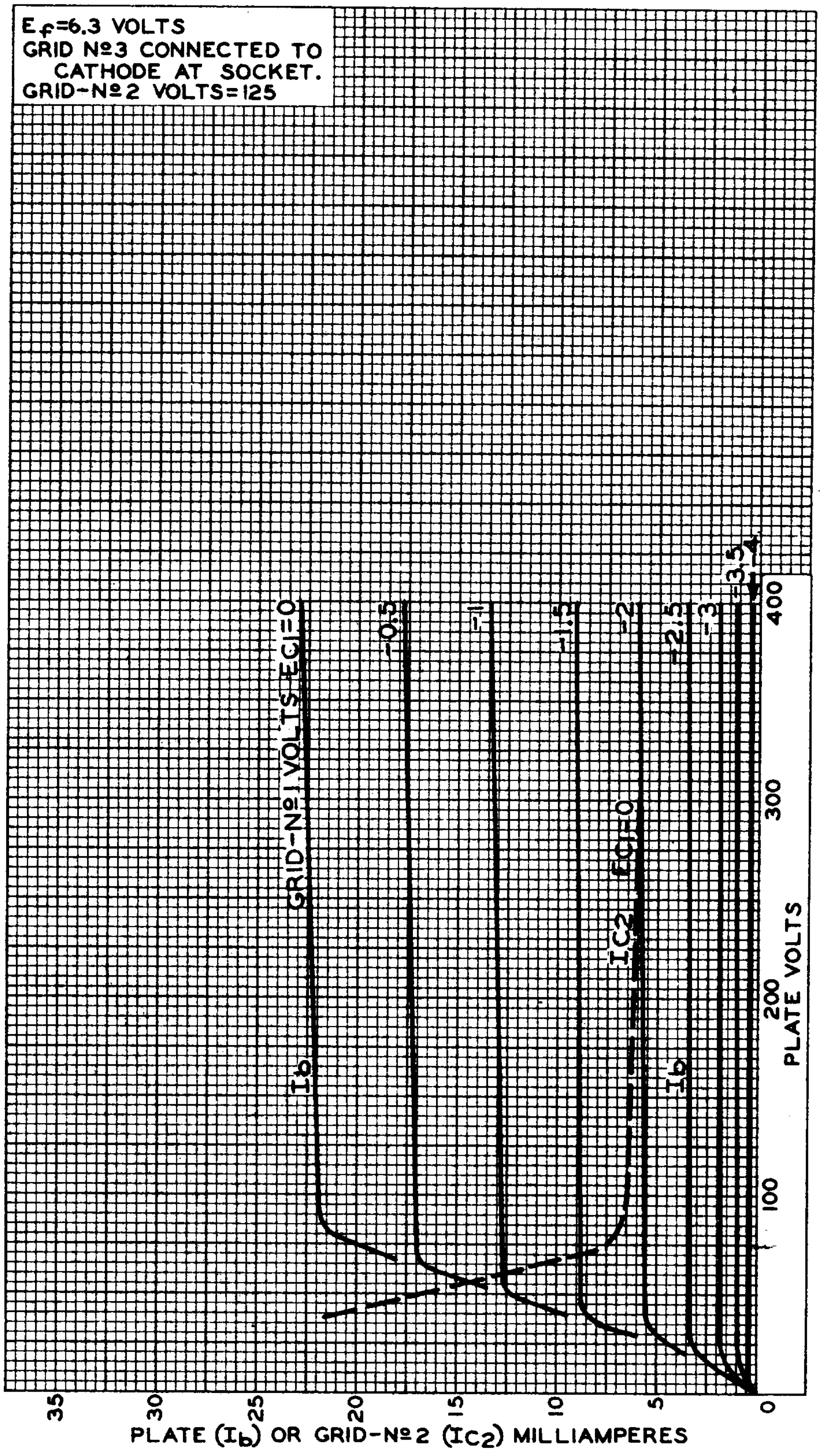
○ With external shield JEDEC No.316 connected to cathode.
♦ Connected to cathode at socket.
▲ The dc component must not exceed 100 volts.

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TENTATIVE DATA

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AVERAGE CHARACTERISTICS



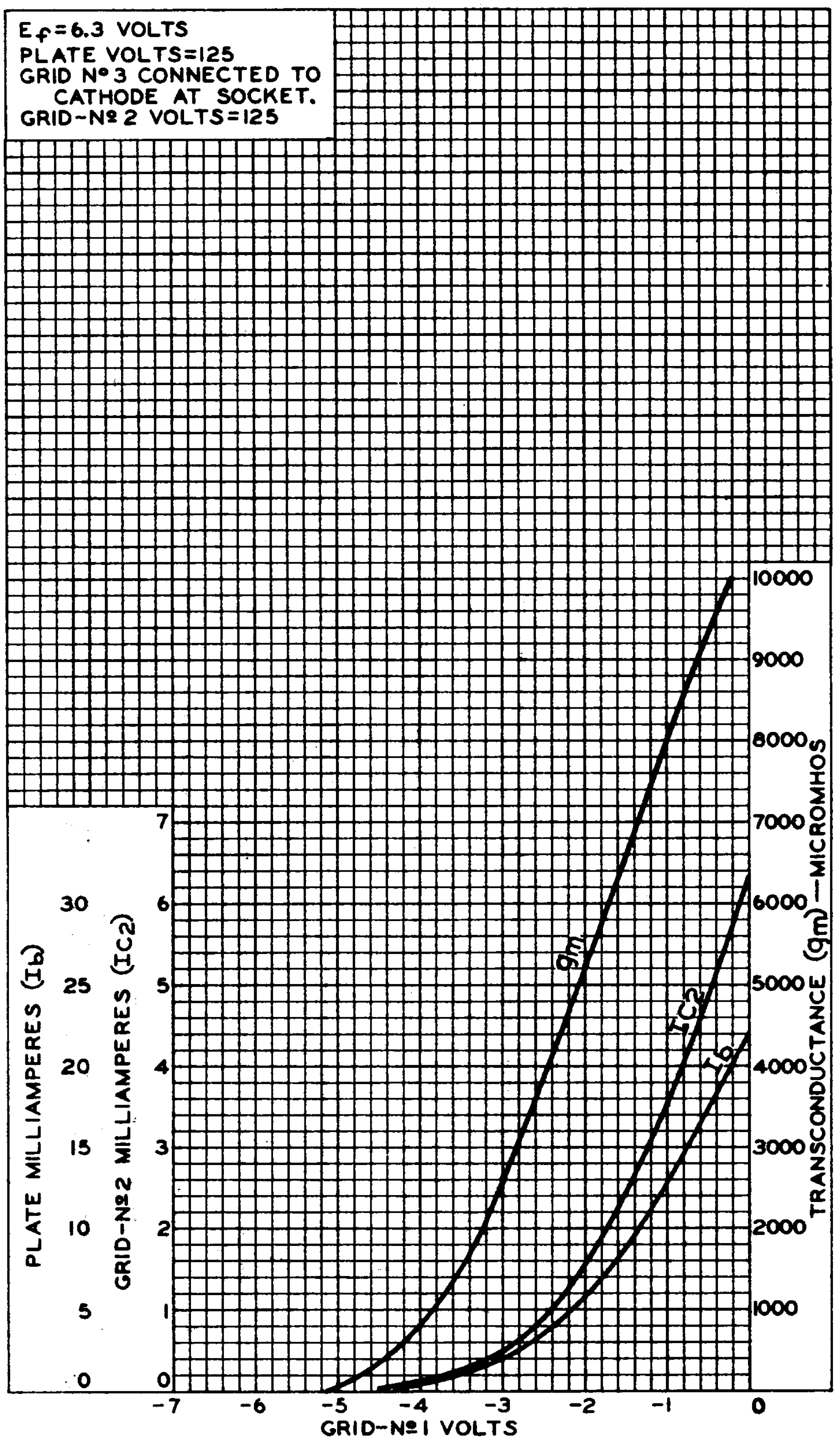
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AVERAGE CHARACTERISTICS



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